UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,286	11/26/2003	Jong-Won Seok	51876P426	1161

8791 7590 05/01/2008

BLAKELY SOKOLOFF TAYLOR & ZAFMAN
1279 OAKMEAD PARKWAY
SUNNYVALE, CA 94085-4040

EXAMINER	
BOSS, BROCK N	

ART UNIT	PAPER NUMBER
2623	

MAIL DATE	DELIVERY MODE
05/01/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/724,286	SEOK ET AL.	
	Examiner	Art Unit	
	BROCK N. BOSS	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *1/28/2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5-9 and 11-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☒ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

BB
4/24/2008

DETAILED ACTION

Response to Amendment

1. Applicant's amendment has been received 3/08/2008. **Claims 1, 7, 11,** and 13 have been amended. **Claims 4** and **10** have been cancelled.

Response to Arguments

2. Applicant's arguments with respect to **claims 1-3, 5-9,** and **11-13** have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. **Claims 1-13** are rejected under 35 U.S.C. 103(a) as being anticipated by Wasilewski et al. (US Patent Number 6,157,719) in view of Morinaga et al. (US Patent Number 6,981,272) in view of Boston et al. (US Patent Number 7,248,776).

Regarding **claim 1**, Wasilewski et al. discloses a broadcasting server system (see Figure 6, element 607) for protecting and managing digital broadcasting contents (see column 4, lines 8-16), comprising: a control means (see column 6, lines 24-55) for generating access control

information (i.e. authentication) and a control word (see column 6, lines 32-37) based on subscriber information (see column 16, lines 19-37), the access control information including CAT (see column 7, element 710), entitlement control message (ECM) (see figure 7, element 719) and entitlement management message (EMM) (see figure 7, element 705(d)) (see also column 19, lines 1-15); an additional data generation means (see column 31, lines 12-30) for generating additional data including use control metadata (see Figure 16 and Figure 17) , tool information metadata (see Figure 22) (see also column 35, lines 44-67) and content purchase information metadata (see column 4, lines 65-67; column 5, lines 1-14) to protect and manage the digital broadcasting contents (see Figure 17, element 1707); a watermarking means (i.e. encoding a packet identifier) for receiving an identification of a broadcasting content (see column 31, lines 13-30), which is referred to as a content ID (see Figure 17, element 1703), and the use control metadata, and watermarking an audio/video (A/V) media signal (see Figure 7, element 709) by using the content ID and the use control metadata as watermarks (see column 32, lines 2-16), the use control metadata including copy control information (CCI) (see column 31, lines 24-25), broadcasting flag (BF) (see Figure 17, element 1705) and retention information (RI) (see column 31, lines 13-30) (see also column 31, lines 48-53); a media encoding means (see Figure 7, element 704 and/or Figure 4, element 327) for compressing the watermarked A/V media signal (see column 18, lines 52-67); an encrypting means (see Figure 7, element 704 and/or Figure 3 element 327) for encrypting the compressed A/V media signal (see column 18, lines 62-67); a multiplexing means (see Figure 7, element 701) for receiving and multiplexing (see column 18, lines 36-51) the compressed and encrypted A/V media signal to thereby output a media transport stream (see Figure 7, "Packetized Elementary Stream"); a re-multiplexing means

(see Figure 7, element 704) for receiving and re-multiplexing (see Figure 7, element 704) the media transport stream, the additional data and the access control information to thereby output a re-multiplexed signal (see column 18, lines 60-62); and a scrambling means (i.e. encryption, see column 2, lines 43-47) for scrambling the re-multiplexed signal by using the control word (see column 18, lines 62-67). In addition Wasilewski discloses a length of time that broadcasting content can remain stored (see column 31, lines 48-53).

However, Wasilewski does not explicitly disclose wherein the use control metadata include the CCI, the BF and the RI, determines from the CCI whether a broadcasting content can be copied freely, copied one time only and never copied, identifies from the BF whether the content is a broadcasting content, and indicates in the RI a length of time that the broadcasting content can remain stored in a hard disk of a receiver.

In an analogous art, Morinaga discloses control data whether a broadcasting content can be copied freely, copied one time only and never copied (see column 5, lines 54-63) (see also column 3, lines 26-31).

It would have been obvious at the time of invention for one of ordinary skill in the art at the time of Applicant's invention to modify Wasilewski to include in the broadcasting management server control information which figures whether a broadcasting content can be copied freely, copied one time only and never copied for the predictable result of preventing unlawful copyright use of content which could be copied multiple times and distributing the content to others who did not purchase the content, this would allow the system to ensure access rights are not violated.

However, neither Wasilewski nor Morinaga disclose in the retention information a length of time that the broadcasting content can remain stored in a hard disk of a receiver.

In an analogous art, Boston discloses retention information including a length of time that the broadcasting content can remain stored in a hard disk of a receiver (see column 14, lines 64-67; column 15, lines 1-12).

It would have been obvious to one of ordinary skill in the art to modify Wasilewski in view of Morinaga to include a length of time that the broadcasting content can remain stored in a hard disk of a receiver to limit access to content that has a limited viewing time such as a rental, a common technique with video demand distribution, this also saves space on the hard disk removing content that shouldn't possibly shouldn't be stored based on access rights.

Regarding **claim 2**, Wasilewski et al. in view of Morinaga in view of discloses everything claimed as applied above (see claim 1). In addition, Wasilewski et al. discloses the system: a purchase result management means for managing broadcasting content purchase result of a user (see column 4, lines 65-67; column 5, lines 1-14) and a monitoring result management means for managing broadcasting content monitoring result (see column 30, lines 58-67; column 31, lines 1-10). (See also Figure 19).

Regarding **claim 3**, Wasilewski et al. discloses everything claimed as applied above (see claim 1). In addition, Wasilewski et al. discloses the system wherein the content ID is abstracted and used for determining whether a content is an unlawful broadcasting content when the broadcasting content is distributed unlawfully (see column 30, lines 58-67; column 31, lines 1-10), or the content ID (see Figure 17, element 1703) is abstracted and used for determining whether a content that are broadcasted currently is authentic or not after monitoring (see column

31, lines 13-30).

Regarding **claim 4**, Wasilewski et al. discloses everything claimed as applied above (see claim 1). In addition, Wasilewski et al. discloses the system wherein the use control metadata include the CCI, the BF and the RI, (see Figure 17) determines from the CCI whether a broadcasting content can be copied (see column 31, lines 23-24), identifies from the BF whether the content is a broadcasting content, and indicates in the RI how long the broadcasting content can be retained being stored in a hard disk of the receiver (see column 31, lines 13-30) (see also column 31, lines 48-53).

Regarding **claim 5**, Wasilewski et al. discloses everything claimed as applied above (see claim 4). In addition, Wasilewski et al. discloses the system, wherein the tool information metadata include: protection and management tool information on the protection and management tools used for protecting and managing the broadcasting content; decrypting information needed for decrypting the broadcasting content to which the protection and management tools are applied, the decrypting information including watermarking information and encrypted transport stream information; location information on locations to which the protection and management tools should be applied; replaceable tool information on kinds of tools that can be replaced; and tools (see Figure 22) (see also column 35, lines 44-67).

Regarding **claim 6**, Wasilewski et al. discloses everything claimed as applied above (see claim 5). In addition, Wasilewski et al. discloses the system, wherein the content purchase information metadata include purchase conditions used when the user purchases the broadcasting content, and a list of contents that can be purchased (see Figure 19) (see also column 32, lines 28-53).

Regarding **claim 7**, Wasilewski et al. discloses a method for operating a broadcasting server system for protecting and managing digital broadcasting contents, the method comprising the steps of: a) generating access control information (see column 6, lines 24-55) and a control word (see column 6, lines 32-37) based on subscriber information (see column 16, lines 19-37), the access control information including CAT (see column 7, element 710), entitlement control message (ECM) (see figure 7, element 719) and entitlement management message (EMM) (see figure 7, element 705(d)) (see also column 19, lines 1-15); b) generating additional data including use control metadata (see Figure 16 and Figure 17), tool information metadata (see Figure 22) (see also column 35, lines 44-67) and content purchase information metadata (see column 4, lines 65-67; column 5, lines 1-14) to protect and manage the digital broadcasting contents (see Figure 17, element 1707); c) receiving an identification of a broadcasting content (see column 31, lines 13-30), which is referred to as a content ID (see Figure 17, element 1703), and the use control metadata and watermarking an audio/video (A/V) media signal by using the content ID and the use control metadata as watermarks (see column 32, lines 2-16), the use control metadata including copy control information (CCI) (see column 31, lines 24-25), broadcasting flag (BF) (see Figure 17, element 1705) and retention information (RI) (see column 31, lines 13-30) (see also column 31, lines 48-53); d) compressing the watermarked A/V media signal (see column 18, lines 52-67); e) encrypting the compressed A/V media signal (see column 18, lines 62-67); f) receiving and multiplexing (see column 18, lines 36-51) the compressed and encrypted A/V media signal (see Figure 7, element 709) to thereby output a media transport stream (see Figure 7, "Packetized Elementary Stream"); g) receiving and re-multiplexing (see Figure 7, element 704) the media transport stream (see column 18, lines 60-62), the additional

data and the access control information to thereby output a re-multiplexed signal (see Figure 7, element 703); and h) scrambling the re-multiplexed signal by using the control word (see column 18, lines 62-67). In addition Wasilewski discloses a length of time that broadcasting content can remain stored (see column 31, lines 48-53).

However, Wasilewski does not explicitly disclose wherein the use control metadata include the CCI, the BF and the RI, determines from the CCI whether a broadcasting content can be copied freely, copied one time only and never copied, identifies from the BF whether the content is a broadcasting content, and indicates in the RI a length of time that the broadcasting content can remain stored in a hard disk of a receiver.

In an analogous art, Morinaga et al. discloses control data whether a broadcasting content can be copied freely, copied one time only and never copied (see column 5, lines 54-63) (see also column 3, lines 26-31).

It would have been obvious at the time of invention for one of ordinary skill in the art at the time of Applicant's invention to modify Wasilewski to include in the broadcasting management server control information which figures whether a broadcasting content can be copied freely, copied one time only and never copied for the predictable result of preventing unlawful copyright use of content which could be copied multiple times and distributing the content to others who did not purchase the content, this would allow the system to ensure access rights are not violated.

However, neither Wasilewski nor Morinaga disclose in the retention information a length of time that the broadcasting content can remain stored in a hard disk of a receiver.

In an analogous art, Boston discloses retention information including a length of time that the broadcasting content can remain stored in a hard disk of a receiver (see column 14, lines 64-67; column 15, lines 1-12).

It would have been obvious to one of ordinary skill in the art to modify Wasilewski in view of Morinaga to include a length of time that the broadcasting content can remain stored in a hard disk of a receiver to limit access to content that has a limited viewing time such as a rental, a common technique with video demand distribution, this also saves space on the hard disk removing content that shouldn't possibly shouldn't be stored based on access rights.

Regarding **claim 8**, Wasilewski et al. discloses everything claimed as applied above (see claim 7). In addition, Wasilewski discloses the method, further comprising a step of: i) managing a broadcasting content purchase result of a user and managing a broadcasting content monitoring result (see column 4, lines 65-67; column 5, lines 1-14). (See column 30, lines 58-67; column 31, lines 1-10). (See also Figure 19).

Regarding **claim 9**, Wasilewski et al. discloses everything claimed as applied above (see claim 7). In addition, Wasilewski discloses the method, wherein the content ID is abstracted and used for determining whether a content is an unlawful broadcasting content when the broadcasting content is distributed unlawfully (see column 30, lines 58-67; column 31, lines 1-10), or a content ID is abstracted and used for determining whether the content that are broadcasted currently is authentic or not after monitoring (see column 31, lines 13-30).

Regarding **claim 11**, Wasilewski et al. discloses everything claimed as applied above (see claim 7). In addition, Wasilewski discloses the method, wherein the tool information metadata include: protection and management tool information on the protection and management tools

used for protecting and managing the broadcasting content; decrypting information needed for decrypting the broadcasting content to which the protection and management tools are applied, the decrypting information including watermarking information and encrypted transport stream information; location information on locations to which the protection and management tools should be applied; replaceable tool information on kinds of tools that can be replaced; and tools (see Figure 22) (see also column 35, lines 44-67).

Regarding **claim 12**, Wasilewski et al. discloses everything claimed as applied above (see claim 11). In addition, Wasilewski discloses the method, wherein the content purchase information metadata include purchase conditions used when the user purchases the broadcasting content, and a list of contents that can be purchased (see Figure 19) (see also column 32, lines 28-53).

Regarding **claim 13**, Wasilewski et al. discloses a computer-readable recording medium for recording a program that implements a method for operating a broadcasting server system that protects and manages digital broadcasting contents, comprising the steps of: a) generating access control information (see column 6, lines 24-55) and a control word (see column 6, lines 32-37) based on subscriber information (see column 16, lines 19-37), the access control information including CAT (see column 7, element 710), entitlement control message (ECM) (see figure 7, element 719) and entitlement management message (EMM) (see figure 7, element 705(d)) (see also column 19, lines 1-15); b) generating additional data including use control metadata, tool information metadata and content purchase information metadata to protect and manage the digital broadcasting contents (see Figure 17, element 1707); c) receiving an identification of a broadcasting content, which is referred to as a content ID (see Figure 17,

element 1703), and the use control metadata and watermarking an audio/video (A/V) media signal by using the content ID and the use control metadata as watermarks (see column 32, lines 2-16), the use control metadata including copy control information (CCI) (see column 31, lines 24-25), broadcasting flag (BF) (see Figure 17, element 1705) and retention information (RI); d) compressing the watermarked A/V media signal (see column 18, lines 52-67); e) encrypting the compressed A/V media signal (see column 18, lines 62-67); f) receiving and multiplexing (see column 18, lines 36-51) the compressed and encrypted A/V media signal to thereby output a media transport stream; g) receiving and re-multiplexing the media transport stream (see Figure 7, element 701) (see column 18, lines 60-62), the additional data and the access control information to thereby output a re-multiplexed signal (see column 18, lines 60-62); and h) scrambling (i.e. encryption, see column 2, lines 43-47) the re-multiplexed signal by using the control word (see column 18, lines 62-67).

However, Wasilewski does not explicitly disclose wherein the use control metadata include the CCI, the BF and the RI, determines from the CCI whether a broadcasting content can be copied freely, copied one time only and never copied, identifies from the BF whether the content is a broadcasting content, and indicates in the RI a length of time that the broadcasting content can remain stored in a hard disk of a receiver. In addition Wasilewski discloses a length of time that broadcasting content can remain stored (see column 31, lines 48-53).

In an analogous art, Morinaga et al. discloses control data whether a broadcasting content can be copied freely, copied one time only and never copied (see column 5, lines 54-63) (see also column 3, lines 26-31).

It would have been obvious at the time of invention for one of ordinary skill in the art at the time of Applicant's invention to modify Wasilewski to include in the broadcasting management server control information which figures whether a broadcasting content can be copied freely, copied one time only and never copied for the predictable result of preventing unlawful copyright use of content which could be copied multiple times and distributing the content to others who did not purchase the content, this would allow the system to ensure access rights are not violated.

However, neither Wasilewski nor Morinaga disclose in the retention information a length of time that the broadcasting content can remain stored in a hard disk of a receiver.

In an analogous art, Boston discloses retention information including a length of time that the broadcasting content can remain stored in a hard disk of a receiver (see column 14, lines 64-67; column 15, lines 1-12).

It would have been obvious to one of ordinary skill in the art to modify Wasilewski in view of Morinaga to include a length of time that the broadcasting content can remain stored in a hard disk of a receiver to limit access to content that has a limited viewing time such as a rental, a common technique with video demand distribution, this also saves space on the hard disk removing content that shouldn't possibly shouldn't be stored based on access rights and to prevent violation of those access rights.

However, neither Wasilewski nor Morinaga disclose in the retention information a length of time that the broadcasting content can remain stored in a hard disk of a receiver.

In an analogous art, Boston discloses retention information including a length of time that the broadcasting content can remain stored in a hard disk of a receiver (see column 14, lines 64-67; column 15, lines 1-12).

It would have been obvious to one of ordinary skill in the art to modify Wasilewski in view of Morinaga to include a length of time that the broadcasting content can remain stored in a hard disk of a receiver to limit access to content that has a limited viewing time such as a rental, a common technique with video demand distribution, this also saves space on the hard disk removing content that shouldn't possibly shouldn't be stored based on access rights.

Conclusion

5. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BROCK N. BOSS whose telephone number is (571)270-1660. The examiner can normally be reached on Monday-Thursday 9:30-7:30 Eastern Standard Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on (571) 272-7304. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

4/24/2008

/Vivek Srivastava/

Supervisory Patent Examiner, Art Unit 2623